

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Original) A high frequency sputtering device; comprising:
- a processing chamber;
 - a high frequency power supply;
 - a cathode which is arranged inside said processing chamber and is electrically insulated from the processing chamber and has high frequency electric power applied to it from said high frequency power supply;
 - a target mounted on said cathode;
 - an annular dielectric member is in contact with an outer face of said cathode in a vicinity of said target;
 - said dielectric member has a projecting part which projects beyond the target mounting face of said cathode in the direction of the target;
 - an annular metal member is mounted on said projecting part of said dielectric member;
 - said metal member projects greater than or equal to a first distance inwardly of an inner circumferential face of said projecting part;
 - said metal member is not in contact with said cathode or said target;

a minimum distance between said metal member and said target is less than or equal to the first distance.

2. (Original) The high frequency sputtering device as claimed in claim 1, wherein said metal member is grounded.

3. (Original) The high frequency sputtering device as claimed in claim 1, wherein said metal member is electrically insulated from said processing chamber.

4. (Original) The high frequency sputtering device as claimed in claim 1, wherein said metal member and said target are made from the same material.

5. (Original) The high frequency sputtering device as claimed in claim 1, wherein there are a plurality of said metal members, and the gap between said metal members is bent such that it is not possible to look through from the mouth part of the gap to the surface of the dielectric member.

6. (Original) The high frequency sputtering device as claimed in claim 1, wherein the first distance is about 3 mm.

7. (Original) The high frequency sputtering device as claimed in claim 6, wherein said metal member and said target are made from the same material.

8. (Original) The high frequency sputtering device as claimed in claim 2, wherein said metal member and said target are made from the same material.

9. (Original) The high frequency sputtering device as claimed in claim 3, wherein said metal member and said target are made from the same material.

10. (Original) The high frequency sputtering device as claimed in claim 6, wherein there are a plurality of said metal members, and the gap between said metal members is bent such that it is not possible to look through from the mouth part of the gap to the surface of the dielectric member.

11. (Original) The high frequency sputtering device as claimed in claim 2, wherein there are a plurality of said metal members, and the gap between said metal members is bent such that it is not possible to look through from the mouth part of the gap to the surface of the dielectric member.

12. (Original) The high frequency sputtering device as claimed in claim 3, wherein there are a plurality of said metal members, and the gap between said metal

members is bent such that it is not possible to look through from the mouth part of the gap to the surface of the dielectric member.

13. (Original) The high frequency sputtering device as claimed in claim 4, wherein there are a plurality of said metal members, and the gap between said metal members is bent such that it is not possible to look through from the mouth part of the gap to the surface of the dielectric member.

14. (Currently Amended) A high frequency sputtering device, comprising:

- a processing chamber;
- a high frequency power supply;
- a cathode inside the processing chamber, the cathode being electrically insulated from the processing chamber and connected to the high frequency power supply, the cathode extending only along a given axial extent of the processing chamber;
- a target mounted on a first side of the cathode; and
- a metal plate mounted in the processing chamber adjacent to the cathode but only in a location outside of the given axial extent of the cathode, the metal plate having an opening in a central portion thereof, wherein an outer circumferential edge of the metal plate is electrically grounded to the processing chamber;

the metal plate is arranged so as to form a gap having a first portion between the metal plate and the cathode and a second portion between the metal plate and the target,

wherein the gap is sufficiently narrow and sufficiently long so as to substantially prevent plasma from passing through the gap, wherein the gap includes a bend between the first portion and the second portion so that the gap is substantially L-shaped.

15. (Original) The high frequency sputtering device as claimed in claim 14, wherein the metal plate is located in radial alignment with the target.

16. (Previously Presented) The high frequency sputtering device as claimed in claim 14, wherein the metal plate is located at a side of the target.

17. (Original) The high frequency sputtering device as claimed in claim 14, wherein the target and the metal plate are made of the same material.

18. (Original) The high frequency sputtering device as claimed in claim 14, wherein a width of the gap is less than or equal to about 3 mm.

19. (Original) The high frequency sputtering device as claimed in claim 14, wherein a depth of the gap is greater than or equal to about 3 mm.

20. (Original) The high frequency sputtering device as claimed in claim 18, wherein a depth of the gap is greater than or equal to about 3 mm.

21. (Currently Amended) The high frequency sputtering device as claimed in claim 14, further comprising a dielectric ring between an outer circumferential surface of the cathode and an inner circumferential surface of the processing chamber, wherein ~~the gap includes:~~

~~an axial component~~ the second portion of the gap is defined by a space extending axially between the metal plate and the target, the ~~axial component~~ second portion having an axially extending length, and

~~a radial component~~ the first portion of the gap is defined by a space extending radially between the dielectric ring and a radial point defined by an inner circumferential surface of the metal plate, the ~~radial component~~ first portion having a radially extending length,

wherein the radially extending length is 3 mm or greater.

22. (Currently Amended) The high frequency sputtering device as claimed in claim 14, wherein the first portion of the gap ~~includes a radial component~~ is defined by a space extending radially between a radial point defined by an outer edge of the cathode and another radial point defined by an inner circumferential surface of the metal plate, the ~~radial component~~ first portion having a radially extending length of 3 mm or greater.

23. (Currently Amended) The high frequency sputtering device as claimed in claim 14, further comprising a dielectric ring between an outer circumferential surface of

the cathode and an inner circumferential surface of the processing chamber, wherein ~~the gap includes:~~

~~an axial component~~ the second portion of the gap is defined by a space extending axially between the metal plate and the target, the ~~axial component~~ second portion having an axially extending length, and

~~a radial component~~ the first portion of the gap is defined by a space extending radially between the dielectric ring and a radial point defined by an inner circumferential surface of the metal plate, the ~~radial component~~ first portion having a radially extending length,

wherein the axially extending length and the radially extending length together is greater than 3 mm ~~or greater~~.

24. (Original) The high frequency sputtering device as claimed in claim 14, wherein a width of the gap is less than or equal to 3 mm.

25. (Original) The high frequency sputtering device as claimed in claim 14, wherein a depth of the gap is greater than or equal to 3 mm.

26. (Original) The high frequency sputtering device as claimed in claim 18, wherein a depth of the gap is greater than or equal to 3 mm.

27. (Currently Amended) The high frequency sputtering device as claimed in claim 14, wherein ~~the gap includes:~~

~~an axial component~~ the second portion of the gap is defined by a space extending axially between the metal plate and the target, the ~~axial component~~ second portion having an axially extending length, and

~~a radial component~~ the first portion of the gap is defined by a space extending radially between a first radial point defined by an inner circumferential surface of the metal plate and a second radial point defined by an outer circumferential surface of the cathode, the ~~radial component~~ first portion having a radially extending length,

wherein the radially extending length is 3 mm or greater.

28. (Currently Amended) The high frequency sputtering device as claimed in claim 14, wherein ~~the gap includes:~~

~~an axial component~~ the second portion of the gap is defined by a space extending axially between the metal plate and the target, the ~~axial component~~ second portion having an axially extending length, and

~~a radial component~~ the first portion of the gap is defined by a space extending radially between a first radial point defined by an inner circumferential surface of the metal plate and a second radial point defined by an outer circumferential surface of the cathode, the ~~radial component~~ first portion having a radially extending length,

wherein the axially extending length and the radially extending length together is greater than 3 mm or greater.

29. (New) The high frequency sputter device of claim 14, wherein the first portion is defined between substantially horizontal surfaces of the metal plate and the cathode and the second portion is defined between substantially vertical surfaces of the metal plate and the target.

30. (New) The high frequency sputter device of claim 29, wherein an opening of the gap closest to the target is in the second portion